

Attorney Docket No. P67083US0
Application No. 09/914,870

Remarks/Arguments:

The specification is amended, hereby, to insert the heading "Brief Description of the Drawings" and to insert the identifiers "SEQ ID NO: 1" and "SEQ ID NO: 2."

Claims 11-18, presented hereby, are pending.

Claims 1-10 are canceled, without prejudice or disclaimer.

Claims 11 and 16-18 contain subject matter of claim 1 revised as described in the subject application (paragraph bridging pages 3 and 4 and page 5, 2nd ¶). Claims 12, 14, and 15 correspond to claims 4, 6, and 10, respectively, made dependent directly or indirectly on claim 11. Claim 13 corresponds to claim 5 revised by deleting the word "usual" and by deleting the phrase "in homologous or heterologous expression."

All objections and rejections applied against claims 2 and 3 are rendered moot by cancellation of these claims, hereby. The remaining objections to the claims, and the rejections under §101, 112, 1st ¶, and 112, 2nd ¶, are overcome by the instant amendment; i.e., the present claims are limited to the nucleic acid having the sequence in "SEQ ID NO: 1," or a nucleic acid "fragment having at least 40% homology" with the sequence in SEQ ID NO: 1," the alleged instances of indefinite claim language are not found in the present claims, proper antecedent basis is found throughout then present claims, and the present "method" claims recite the active method step "transforming a ciliate with a nucleic acid." Thus, present claims 11-18 comply with US practice and resolve the formalities rejections and objections raised in the Office Action.

Attorney Docket No. P67083US0
Application No. 09/914,870

Claims 1-6 and 10 were rejected under 35 U.S.C. 102(b) as allegedly anticipated by each of Aerts (US 5,928,928) and Lacoste (*J. Biol. Chem.*, 267, 1992, 5941-48). Reconsideration is requested.

Neither Aerts nor Lacoste discloses the use of a nucleic acid having a sequence according to SEQ ID No: 1, or a fragment thereof having 40% homology therewith, for transforming a ciliate organism, as presently claimed. Moreover, neither reference discloses use of the transformed ciliate (in accordance with the present claims) for the homologous or heterologous expression of recombinant proteins and peptides, as presently claimed.

Aerts discloses a human chitinase, its amino acid and nucleotide sequences, and its use as a medicament for the treatment of infections. The use of a nucleic acid as presently claimed is neither explicitly nor implicitly disclosed in the reference.

Lacoste reports on the sorting of proteins in the slime mold *Dictyostelium discoideum*, via transformation with a β -hexosaminidase protein. However, a slime mold is totally different from and unrelated to a ciliate organisms; results obtained in one organism cannot be simply extrapolated to an absolutely unrelated organism. Furthermore, Lacoste does not disclose the use of a specific nucleic acid, as recited in the present claims, for the homologous or heterologous expression of recombinant proteins and peptides.

For anticipation under § 102(b) to exist, each and every claim limitation, as arranged in the claim, must be found in a single prior art reference. *Jamesbury Corp. v. Litton Industrial Products, Inc.*, 225 USPQ 253 (Fed. Cir. 1985). The absence from a prior art reference of a single claim

Attorney Docket No. P67083US0
Application No. 09/914,870

limitation negates anticipation. *Kolster Speedsteel A B v. Crucible Inc.*, 230 USPQ 81 (Fed. Cir. 1986). A reference that discloses "substantially the same invention" is not an anticipation. *Jamesbury Corp.* To anticipate the claim, each claim limitation must "*identically* appear" in the reference disclosure. *Gechter v. Davidson*, 43 USPQ2d 1030, 1032 (Fed. Cir. 1997) (*emphasis added*). To be novelty defeating, a reference must put the public in possession of the identical invention claimed. *In re Donahue*, 226 USPQ 619 (Fed. Cir. 1985).

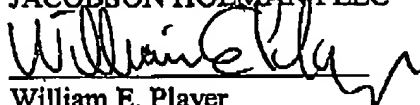
In the present case at least one limitation on the present claims – "transforming a ciliate with a nucleic acid having a sequence according to SEQ ID NO: 1 or a fragment thereof having at least 40% homology therewith" – is absent from each of Aerts and Lacoste. The absence of this limitation negates anticipation of the present claims by either Aerts or Lacoste. *Kolster Speedsteel A B, supra*. Accordingly, withdrawal of the rejections under §102(b) based each of Aerts and Lacoste appears to be in order.

Favorable action is requested.

Respectfully submitted,

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